

III.A.2.N.h. Seasonally flooded temperate broad-leaved evergreen shrubland

III.A.2.N.h.2. PLUCHEA SERICEA SEASONALLY FLOODED SHRUBLAND ALLIANCE

Arrow-weed Seasonally Flooded Shrubland Alliance

PLUCHEA SERICEA SEASONALLY FLOODED SHRUBLAND [PLACEHOLDER]

Arrow-weed Seasonally Flooded Shrubland

ELEMENT CONCEPT

GLOBAL SUMMARY: This evergreen shrubland is found in wetlands from southern California to the Sonoran Desert, and extends north into the Colorado Plateau in southwestern Utah. Elevation ranges from sea level to 1220 m (4000 feet). Stands occur in canyon bottoms, irrigation ditches, streamsides, floodplains, and along the margins of springs. Sites are flat to gently sloping and are permanently or seasonally flooded with a high water table. Water chemistry may be fresh or saline/alkaline. Substrates are generally alluvial and vary from well-drained to poorly drained and coarse-textured to fine-textured soil. The vegetation is characterized by a moderately dense to dense short- to tall-shrub layer (1-5 m tall) that is dominated by *Pluchea sericea*, often forming pure stands. Stands generally form small patches within other wetland and riparian vegetation. Other species are present with low cover and vary regionally. Shrub associates may include *Allenrolfea occidentalis*, *Atriplex* spp., *Baccharis* spp., *Prosopis* spp., *Salix exigua*, *Suaeda moquinii*, and introduced *Tamarix* spp. The typically sparse herbaceous layer, if present, is typically composed of *Distichlis spicata*, *Scirpus americanus*, *Sporobolus airoides*, or *Typha angustifolia*. The presence of weedy species is common in disturbed stands.

ENVIRONMENTAL DESCRIPTION

USFWS Wetland System: PALUSTRINE

Zion National Park Environment: Stands of *Pluchea sericea* occur below 4000 feet on river floodplains with clay loam to sandy soils.

Global Environment: This evergreen shrubland is found in wetlands in southern California, the Mojave, Colorado and Sonoran deserts, and extends north into the Colorado Plateau in southwestern Utah. Elevation ranges from sea level to 1220 m (4000 feet). Stands occur in canyon bottoms, irrigation ditches, streamsides, floodplains, and along the margins of springs. Sites are flat to gently sloping and are permanently or seasonally flooded with a high water table. Water chemistry may be fresh or saline/alkaline. Substrates are generally alluvial and vary from well-drained to poorly drained and coarse-textured to fine-textured soil.

VEGETATION DESCRIPTION

Zion National Park Vegetation: *Pluchea sericea* dominates this association with 40% cover and heights of 1 m. Herbaceous cover is minimal, less than 10%, and usually composed of exotic species due to its frequent exposure to human and/or livestock disturbance.

Global Vegetation: This plant association is characterized by a moderately dense to dense short- to tall-shrub layer (1-5 m tall) that is dominated by *Pluchea sericea*, often forming pure stands. Stands generally form small patches within other wetland and riparian vegetation. Other species are present with low cover and vary regionally. Shrub associates may include *Allenrolfea occidentalis*, *Atriplex canescens*, *Atriplex torreyi*, *Baccharis emoryi*, *Baccharis sergiloides*, *Prosopis glandulosa*, *Prosopis pubescens*, *Salix exigua*, *Suaeda moquinii*, and introduced *Tamarix* spp. The typically sparse herbaceous layer, if present, is typically composed of *Distichlis spicata*, *Scirpus americanus*, *Sporobolus airoides*, or *Typha angustifolia*. Weedy species such as *Erodium cicutarium*, *Lactuca* spp., *Melilotus officinalis* are common in disturbed stands.

Global Dynamics: This riparian association grows in seasonally flooded, freshwater and brackish habitats with permanently saturated ground. Exotic tamarisk species have invaded many occurrences of this alliance.

MOST ABUNDANT SPECIES

Zion National Park

<u>Stratum</u>	<u>Species</u>
TALL SHRUB	<i>Pluchea sericea</i>
SHORT SHRUB	<i>Gutierrezia sarothrae</i>
GRAMINOID	<i>Sporobolus cryptandrus</i>
FORB	<i>Melilotus officinalis</i>

Global

<u>Stratum</u>	<u>Species</u>
TALL SHRUB	<i>Pluchea sericea</i>

CHARACTERISTIC SPECIES

Zion National Park

<u>Stratum</u>	<u>Species</u>
TALL SHRUB	<i>Pluchea sericea</i>
GRAMINOID	<i>Sporobolus cryptandrus</i>

Global

<u>Stratum</u>	<u>Species</u>
TALL SHRUB	<i>Pluchea sericea</i>

GLOBAL SIMILAR ASSOCIATIONS:

Information not available.

GLOBAL STATUS AND CLASSIFICATION COMMENTS

Global Conservation Status Rank: G3?.

Global Comments: Information not available.

ELEMENT DISTRIBUTION

Zion National Park Range: This association occurs near the confluence of the East Fork and North Fork of the Virgin River. Additional stands are found along the Virgin River at the southern boundary of the park. Another stand within the park occurs in Coal Pits Wash near the southern boundary.

Global Range: This wetland association occurs in wetlands in southern California, the Mojave, Colorado and Sonoran deserts, and extends north into the Colorado Plateau in southwestern Utah.

Nations: US

States/Provinces: CA UT

ELEMENT SOURCES

Zion National Park Inventory Notes: Plots: 522

Classification Confidence: 2 **Identifier:** CEGL003080

REFERENCES: Barbour and Major 1977, Beatley 1976, Holland 1986b, Sawyer and Keeler-Wolf 1995